

Amendments to the Drawings:

The attached replacement sheet of drawing includes changes to Fig. 2 and replaces the drawing submitted on July 15, 2007 and the original sheet.

In Figure 2, the text has been deleted. This text has been added to the Description of the Drawings in the specification.

Attachments following last page of this Amendment:

Replacement Sheet (1 page)

REMARKS

In reply to the Office Action mailed March 22, 2007, Applicants amended the specification, the abstract, and claims 1, 10, 30, 35, 38, 39, and 42-44. Applicants have also provided replacement drawings. Claims 1-39 and 42-44 are pending and under examination. Please consider the following remarks.

The drawings submitted July 19, 2004 were objected to as failing to be labeled as replacement drawings. Applicants submit herewith a set of drawings labeled as "replacement drawings" and request that the corresponding rejection be withdrawn.

The specification was objected to due to various informalities as provided on pages 3 and 4 of the Office Action. Applicants have amended the specification to address each of these informalities, including the removal of hyperlinks and identification of trademarked material. Applicants therefore request that the corresponding objections be withdrawn.

Claims 1-39 and 42-44 were rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. The Examiner asserts that the invention does not produce a useful, concrete and tangible result (See Office Action, page 6.). Applicants have amended independent claims 1, 39, 42, 43, and 44 to provide in each instance a useful, concrete and/or tangible result. Specifically, Applicants have amended independent claims 1, 39, 42, 43, and 44 to recite that the output ligands be displayed. Support for these amendments can be found, for example, in Figure 8.

Claims 1-39 and 42-44 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Independent claims 1, 39, 42, 43, and 44 were rejected as lacking antecedent basis for terms and phrases including "subset of atoms and/or bonds from each ligand," "the matching bond," "a first subset," and "a second subset." Applicants have amended each of these independent claims to provide antecedent basis for these terms, and therefore request that the corresponding rejections be withdrawn.

Independent claims 1, 39, 42, 43, and 44 were also rejected based term "homologous," which is alleged to be "a relative term that renders the claims indefinite." (See Office Action,

the paragraph bridging pages 6 and 7.) Applicants have provided guidance and described examples of homologous features that can be used in the present invention, for example, in the paragraph beginning on page 11, line 5 of the specification. Exemplary characteristics for homologous features include common structural features, for example common atoms from a particular region of a ligand. Applicants therefore submit that the term homologous, when read in the context of the application as a whole would be clear and therefore satisfy the requirements of 35 U.S.C. 112.

Dependent claims 10, 30, 32, 35, and 38 were rejected based on terms or phrases that are alleged to either lack antecedent basis or otherwise render the claim unclear. Applicants have amended claim 10 to provide at least one ligand to refer back to the plurality of ligands recited in claim 1. Applicants have amended claim 30 to provide that the recited composition comprise a compound that includes a ligand from a subset of output models, thereby clarifying the relationship of the compound with the ligand. Applicants have amended claim 35 to provide that the recited ligand is the one mapped from step (2). Applicants have also amended claim 38 to recite that at least two matching bonds between the ligands are identified within the macrocycle of each ligand, thereby clarifying the matching as recited in the claim.

Applicants submit that the pending claims satisfy all statutory requirements and request that the application be placed in condition for allowance.

Applicant : Pierce et al.
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Please apply any charges or credits to deposit account 06-1050, referencing attorney docket number 14435-004001.

Respectfully submitted,

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